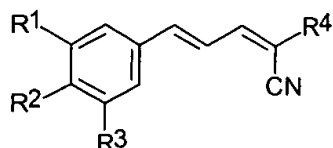


In the claims:

1. **(Currently Amended)** A pharmaceutical composition suitable for oral, intravenous, intraperitoneal, subcutaneous, intramuscular, nasal, intrapulmonary, intrathecal, or rectal administration, comprising a pharmaceutically acceptable diluent or carrier and a compound of Formula I, or a and salts, solvates or hydrates thereof:



I

wherein

R¹ and R² are each independently selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, CF₃, OCF₃ and halo;

R³ is selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, halo and CH₂-S-(CH₂)_n Ar;

R⁴ is selected from the group consisting of C(X)R⁵, SO₃Ar, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), P(O)(OH)₂, P(O)(OC₁₋₆alkyl)₂, and C(NH₂)=C(CN)₂;

X is selected from O, S, NH and N-C₁₋₆alkyl;

R⁵ is selected from the group consisting of NH₂, OH, NH(CH₂)_pAr, NH(CH₂)_pOH, (CH₂)_pOC₁₋₆alkyl, C₁₋₆alkyl, C₁₋₆alkoxy, NHNH₂, NHC(O)NH₂, NHC(O)C₁₋₆alkoxy, N-morpholino and N-pyrrolidino; and

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo;

n is 0 to 4; and

p is 1-4.

2. **(Currently Amended)** The composition compound according to claim 1, wherein R^1 and R^2 are each independently selected from the group consisting of H, OH, C_{1-4} alkyl, C_{1-4} alkoxy, NH_2 , $NH-C_{1-4}$ alkyl, SH, $S-C_{1-4}$ alkyl, $O-Si(C_{1-4}alkyl)(C_{1-4}alkyl)(C_{1-4}alkyl)$, NO_2 , CF_3 , OCF_3 and halo.
3. **(Currently Amended)** The composition compound according to claim 2, wherein R^1 and R^2 are each independently selected from the group consisting of H, OH, OCH_3 , $O-Si(CH_3)_2(tBu)$, S-Me, SH and NO_2 .
4. **(Currently Amended)** The composition compound according to claim 3, wherein R^1 and R^2 are both OH or R^1 and R^2 are both OCH_3 .
5. **(Currently Amended)** The composition compound according to claim 4, wherein R^1 is OCH_3 and R^2 is OH.
6. **(Currently Amended)** The composition compound according to claim 1, wherein R^3 is selected from the group consisting of H, OH, C_{1-4} alkyl, C_{1-4} alkoxy, NH_2 , $NH-C_{1-4}$ alkyl, $N(C_{1-4}alkyl)(C_{1-4}alkyl)$, SH, $S-C_{1-4}alkyl$, NO_2 and halo.
7. **(Currently Amended)** The composition compound according to claim 6, wherein R^3 is selected from the group consisting of H, OH, OCH_3 , SH, SMe, NO_2 and halo.
8. **(Currently Amended)** The composition compound according to claim 7, wherein R^3 is selected from the group consisting of H, OH and OCH_3 .
9. **(Currently Amended)** The composition compound according to claim 1, wherein R^4 is selected from the group consisting of $C(X)R^5$ and $C(NH_2)=C(CN)_2$.
10. **(Currently Amended)** The composition compound according to claim 9, wherein R^4 is $C(X)R^5$.

11. **(Currently Amended)** The composition compound according to claim 10, wherein X is selected from the group consisting of O and S.
12. **(Currently Amended)** The composition compound according to claim 10, wherein R⁵ is selected from the group consisting of NH₂, OH, NH(CH₂)_pAr, NH(CH₂)_pOH and C₁₋₄alkoxy.
13. **(Currently Amended)** The composition compound according to claim 12, wherein p is 1-3.
14. **(Currently Amended)** The composition compound according to claim 13, wherein R⁵ is selected from the group consisting of NH₂, OH, NH(CH₂)_pAr, NH(CH₂)_pOH and OCH₃.
15. **(Currently Amended)** The composition compound according to claim 14, wherein p is 1-2.
16. **(Currently Amended)** The composition compound according to claim 1, wherein Ar is an unsubstituted phenyl group or a phenyl group substituted with 1-4 substituents optionally selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo.
17. **(Currently Amended)** The composition compound according to claim 14, wherein Ar is an unsubstituted phenyl group or a phenyl group substituted with 1-4 substituents optionally selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo.
18. **(Currently Amended)** The composition compound according to any of claims 16 and 17, wherein Ar is an unsubstituted phenyl group or phenyl group substituted with 1-2 substituents optionally selected from the group consisting of OH, C₁₋₄alkyl, C₁₋₄alkoxy, NH₂, NH-C₁₋₄alkyl, N(C₁₋₄alkyl)(C₁₋₄alkyl), SH, S-C₁₋₄alkyl, NO₂, CF₃, OCF₃ and halo.

19. **(Currently Amended)** The composition compound according to claim 18, wherein Ar is an unsubstituted phenyl group or phenyl group substituted with 1-2 substituents optionally selected from the group consisting of OH, OCH₃, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, CF₃, OCF₃ and halo.
20. **(Currently Amended)** The composition compound according to claim 19, wherein Ar is selected from the group consisting of phenyl and 3,4-dihydroxyphenyl.
21. **(Currently Amended)** The composition compound according to claim 1, wherein the compound is selected from the group consisting of:
- ~~(E,E)-2-(benzylamido)-3-styrylacrylonitrile (CR1);~~
- ~~(E,E)-2-(benzylamido)-3-(3,4-dimethoxystyryl)acrylonitrile (CR2);~~
- ~~(E,E)-2-(benzylamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR3);~~
- ~~(E,E)-2-(benzylamido)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4);~~
- ~~(E,E)-2-(phenylethylamido)-3-(3,4-dimethoxystyryl)acrylonitrile (CR5);~~
- ~~(E,E)-2-(phenylethylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR8);~~
- ~~(E,E)-2-(phenylpropylamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR9);~~
- ~~(E,E)-2-(3,4-dihydroxybenzylamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11);~~
- ~~(E,E)-2-thioacetamido-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR12);~~
- ~~(E,E)-2-acetamido-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR13);~~
- ~~(E,E)-2-carboxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR14);~~
- ~~(E,E)-2-carbomethoxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR15);~~
- ~~(E,E)-2-aminocarbonylacetamido-3-[3,4-bis(t-butyl dimethylsilyloxy)styryl]acrylonitrile (CR16);~~
- ~~(E,E)-2-acetamido-3-(3,4-dihydroxystyryl)acrylonitrile (CR17);~~
- ~~(E,E)-2-(benzylaminocarbonyl)-3-[(3,4-bis(t-butyl dimethylsilyloxy)styryl)]acrylonitrile (CR18);~~
- ~~(E,E)-2-(3,4-dihydroxybenzylamido)-3-styrylacrylonitrile (CR19);~~

~~(E,E)-2-(3,4-dihydroxybenzylaminocarbonylde)-3-[3,4-bis(t-butyl~~
~~dimethylsilyloxy)styryl)]acrylonitrile (CR20);~~
~~(E,E)-2-(3,4-dihydroxybenzylamido)-3-(3,4-dihydroxystyryl)acrylonitrile (CR21);~~
~~(E,E)-2-(β -ethanolamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR24);~~
~~(E,E)-2-(benzylaminocarbonylde)-3-(4-nitrostyryl)acrylonitrile (CR27);~~
~~(E,E)-2-(3,4-dihydroxybenzylaminocarbonylde)-3-(4-nitrostyryl)acrylonitrile (CR28);~~
 and
~~(Z,E)-2-(1-amino-2,2-dicyanoethenyl)-3-(4-nitrostyryl)acrylonitrile (CR29).~~

22. **(Currently Amended)** The composition compound according to claim 21, selected from the group consisting of:

~~(E,E)-2-(benzylaminocarbonylde)-3-styrylacrylonitrile (CR1);~~
~~(E,E)-2-(benzylaminocarbonylde)-3-(3,4-dimethoxystyryl)acrylonitrile (CR2);~~
~~(E,E)-2-(benzylaminocarbonylde)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile~~
~~(CR3);~~
~~(E,E)-2-(benzylamido)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4);~~
~~(E,E)-2-(phenylethylaminocarbonylde)-3-(3,4-dimethoxystyryl)acrylonitrile (CR5);~~
~~(E,E)-2-(phenylpropylaminocarbonylde)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile~~
~~(CR9);~~
~~(E,E)-2-(3,4-dihydroxybenzylamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile~~
~~(CR11);~~
~~(E,E)-2-aminothiocabonylthioacetamido-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile~~
~~(CR12);~~
~~(E,E)-2-aminocarbonylaetamido-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile~~
~~(CR13);~~
~~(E,E)-2-carboxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR14); and~~
~~(E,E)-2-carbomethoxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR15);~~
~~(E,E)-2-acetamido-3-(3,4-dihydroxystyryl)acrylonitrile (CR17);~~
~~(E,E)-2-(3,4-dihydroxybenzylamido)-3-styrylacrylonitrile (CR19);~~
~~(E,E)-2-(3,4-dihydroxybenzylamido)-3-(3,4-dihydroxystyryl)acrylonitrile (CR21); and~~
~~(E,E)-2-(β -ethanolamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR24).~~

23. **(Currently Amended)** The composition compound according to claim 22, selected from the group consisting of:
- (*E,E*)-2-(benzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4);
- (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11);
- (*E,E*)-2-aminocarbonylacetamide-3-(3,4-dihydroxystyryl)acrylonitrile (CR17);
- (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-styrylacrylonitrile (CR19);
- (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR21); and
- (*E,E*)-2-(β -ethanolaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR24).
24. **(Currently Amended)** ~~The compound~~ A pharmaceutical composition comprising a pharmaceutically acceptable diluent or carrier and (*E,E*)-2-(benzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4).
25. **(Currently Amended)** ~~The compound~~ A pharmaceutical composition comprising a pharmaceutically acceptable diluent or carrier and (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11).
26. **(Currently Amended)** ~~The compound~~ A pharmaceutical composition comprising a pharmaceutically acceptable diluent or carrier and (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-styrylacrylonitrile (CR19) ~~(*E,E*)-2-(3,4-dihydroxybenzylamide)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11).~~
27. (Cancelled)
28. **(Currently Amended)** A method of modulating cell proliferation comprising administering an effective amount of a ~~compound~~ composition of claim 23 ~~to modulate cell proliferation~~ to a cell or animal in need thereof.

29. **(Currently Amended)** A method of inhibiting cell proliferation comprising administering an effective amount of a ~~compound~~ composition of claim 23 ~~to inhibit cell proliferation~~ to a cell or animal in need thereof.
30. **(Original)** The method of claim 29, wherein the cell proliferation that is inhibited is cancer cell proliferation.
31. **(Currently Amended)** A method of treating cancer comprising administering to an animal in need thereof an effective amount of a composition ~~compound~~ of claim 23.
32. **(Currently Amended)** The method of claim 30 or 31, wherein said cancer is a hematopoietic cell cancer.
33. **(Currently Amended)** The method of claim 30 or 31, wherein said cancer is a leukemia, a lymphoma, a myeloma or a carcinoma.
34. **(Currently Amended)** The method of claim 33, wherein said leukemia is acute lymphoblastic leukemia, Philadelphia+ leukemia, Philadelphia- leukemia, acute myelocytic leukemia, chronic myeloid leukemia, chronic lymphocytic leukemia or juvenile myelomonocyte leukemia.
35. **(Currently Amended)** The method of claim 34, wherein said leukemia is acute lymphoblastic leukemia.
36. **(Currently Amended)** A method of modulating cell proliferation, comprising administering an effective amount of a ~~compound capable of modulating cell proliferation according to claim 1 or~~ a composition of claim 1 ~~27~~ to a cell or animal in need thereof.
37. **(Currently Amended)** A method of inhibiting cell proliferation, comprising administering an effective amount of a ~~compound capable of inhibiting cell proliferation~~

~~according to claim 1 or a composition according to claim 1~~ 27 to a cell or animal in need thereof.

38. **(Currently Amended)** A method of inhibiting cancer cell proliferation, comprising administering an effective amount of ~~a compound capable of inhibiting cancer cell proliferation according to any one of claim 1 or a composition according to claim 1~~ 27 to a cell or animal in need thereof.

39. (Cancelled)

40. **(Currently Amended)** A method according to claim 38 ~~or 39~~, wherein said cancer is a hematopoietic cell cancer.

41. **(Currently Amended)** A method according to claim 38 ~~or 39~~, wherein said cancer is a leukemia, a lymphoma, a myeloma or a carcinoma.

42. **(Currently Amended)** A method according to claim 41, wherein said leukemia is acute lymphoblastic leukemia, aggressive Philadelphia+ leukemia, acute myelocytic leukemia, chronic myeloid leukemia, chronic lymphocytic leukemia or juvenile myelomonocyte leukemia,

43. **(Currently Amended)** A method according to claim 42, wherein said leukemia is acute lymphoblastic leukemia.

44. (New) A pharmaceutical composition comprising a pharmaceutically acceptable diluent or carrier and (*E,E*)-2-carboxy-3-(3,4-dihydroxystyryl)acrylonitrile.

45. (New) A compound selected from:

(*E,E*)-2-(phenylethylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile
(CR8);

(*E,E*)-2-aminocarbonyl-3-[3,4-bis(t-butyldimethylsilyloxy)styryl]acrylonitrile (CR16);

(*E,E*)-2-(benzylaminocarbonyl)-3-[3,4-bis(*t*-butyldimethylsilyloxy)styryl]acrylonitrile (CR 18);

(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-[3,4-bis(*t*-butyldimethylsilyloxystyryl)]acrylonitrile (CR20);

(*E,E*)-2-(benzylaminocarbonyl)-3-(4-nitrostyryl)acrylonitrile (CR27);

(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(4-nitrostyryl)acrylonitrile (CR28); and

(*Z,E*)-2-(1-amino-2, 2-dicyanoethenyl)-3-(4-nitrostyryl)acrylonitrile (CR29).

46. (New) A compound selected from:

(*E,E*)-2-(benzylaminocarbonyl)-3-styrylacrylonitrile (CR1);

(*E,E*)-2-(benzylaminocarbonyl)-3-(3,4-dimethoxystyryl)acrylonitrile (CR2);

(*E,E*)-2-(benzylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR3);

(*E,E*)-2-(phenylethylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR5);

(*E,E*)-2-(phenylpropylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR9);

(*E,E*)-2-aminothiocarbonyl-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR12);

(*E,E*)-2-aminocarbonyl-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR13);

(*E,E*)-2-carbomethoxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR15).

47. (New) A compound selected from:

(*E,E*)-2-(benzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4);

(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,5dimethoxy-4-hydroxystyryl)acrylonitrile (CR11);

(*E,E*)-2-aminocarbonyl-3-(3,4-dihydroxystyryl)acrylonitrile (CR17);

(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-styrylacrylonitrile (CR19);

(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR21); and

(*E,E*)-2-(β -ethanolaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR24).

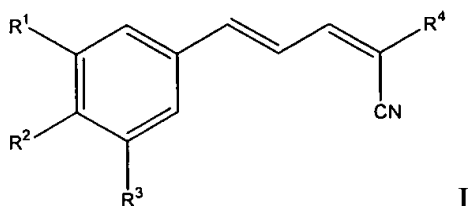
48. (New) A compound (*E,E*)-2-benzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4).

49. (New) A compound (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11).

50. (New) A compound (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-styrylacrylonitrile (CR19).

51. (New) A compound (*E,E*)-2-carboxy-3-(3,4-dihydroxystyryl)acrylonitrile.

52. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



wherein

R^1 and R^2 are each independently selected from the group consisting of OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, NO_2 , CF_3 , OCF_3 and halo;

R^3 is selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}alkyl$, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, NO_2 , halo and $CH_2-S-(CH_2)_nAr$;

R^4 is selected from the group consisting of $C(X)R^5$, SO_3Ar , NH_2 , $NH-C_{1-6}alkyl$, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, $P(O)(OH)_2$, $P(O)(OC_{1-6}alkyl)_2$, and $C(NH_2)=C(CN)_2$;

X is selected from O, S, NH and $N-C_{1-6}alkyl$;

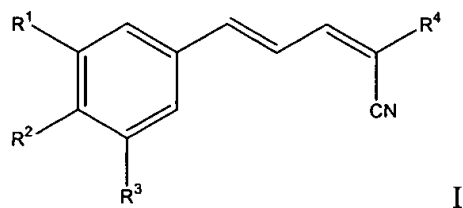
R^5 is selected from the group consisting of NH_2 , $NH(CH_2)_pAr$, $NH(CH_2)_pOH$, $(CH_2)_pOC_{1-6}alkyl$, $C_{1-6}alkyl$, $C_{1-6}alkoxy$, $NHNH_2$, $NHC(O)NH_2$, $NHC(O)C_{1-6}alkoxy$, N-morpholino and N-pyrrolidino; and

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, $C_{1-6}alkyl$, $C_{1-6}alkoxy$, NH_2 , $NH-C_{1-6}alkyl$, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, NO_2 , CF_3 , OCF_3 and halo;

n is 0 to 4; and

p is 1-4.

53. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



wherein

R^1 and R^2 are each independently selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, NO_2 , CF_3 , OCF_3 and halo;

R^3 is selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}alkyl$, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, NO_2 , halo and $CH_2-S-(CH_2)_nAr$;

R^4 is selected from the group consisting of $C(X)R^5$, SO_3Ar , NH_2 , $NH-C_{1-6}alkyl$ and $P(O)(OH)_2$;

X is selected from O, S, NH and $N-C_{1-6}alkyl$;

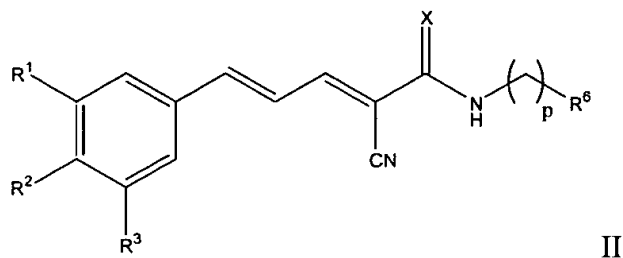
R^5 is selected from the group consisting of $NH(CH_2)_pAr$, $NH(CH_2)_pOH$, $(CH_2)_pOC_{1-6}alkyl$, $NHNH_2$, $NHC(O)NH_2$, $NHC(O)C_{1-6}alkoxy$, N-morpholino and N-pyrrolidino; and

Ar is an aromatic group, unsubstituted with 1-4 substituents, independently selected from the group consisting of OH, $C_{1-6}alkyl$, $C_{1-6}alkoxy$, NH_2 , $NH-C_{1-6}alkyl$, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, NO_2 , CF_3 , OCF_3 and halo;

n is 0 to 4; and

p is 1-4.

54. (New) A compound of Formula II, or a salt, solvate or hydrate thereof:



wherein

R^1 and R^2 are each independently selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, NO_2 , CF_3 , OCF_3 , and halo;

R^3 is selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, NO_2 , halo and $CH_2-S-(CH_2)_nAr$;

R^6 is selected from the group consisting of Ar, OH and $OC_{1-6}alkyl$;

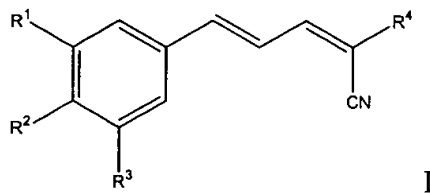
Ar is an aromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, NO_2 , CF_3 , OCF_3 and halo;

X is selected from O and S;

n is 0-4; and

p is 1-4.

55. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



wherein

R^1 and R^2 are each independently selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}alkyl$, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, NO_2 , CF_3 , OCF_3 and halo;

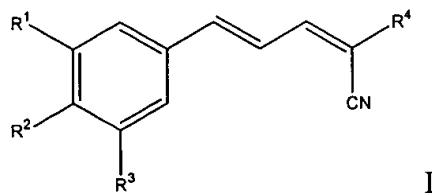
R^3 is selected from the group consisting of C_{1-6} alkyl, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, halo and $CH_2-S-(CH_2)_nAr$;

R^4 is CO_2H ;

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}alkyl$, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}alkyl$, NO_2 , CF_3 , OCF_3 and halo; and

n is 0 to 4.

56. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



wherein

R^1 and R^2 are each independently selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}$ alkyl)(C_{1-6} alkyl), SH, $S-C_{1-6}$ alkyl, $O-Si(C_{1-6}$ alkyl)(C_{1-6} alkyl)(C_{1-6} alkyl), NO_2 , CF_3 , OCF_3 and halo;

R^3 is selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}$ alkyl)(C_{1-6} alkyl), SH, $S-C_{1-6}$ alkyl, $O-Si(C_{1-6}$ alkyl)(C_{1-6} alkyl)(C_{1-6} alkyl), NO_2 , halo and $CH_2-S-(CH_2)_nAr$;

R^4 is CO_2H ;

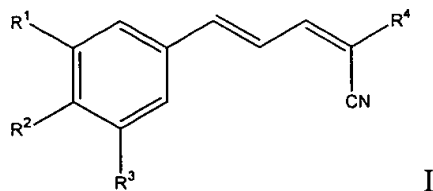
Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}$ alkyl)(C_{1-6} alkyl), SH, $S-C_{1-6}$ alkyl, NO_2 , CF_3 , OCF_3 and halo;

n is 0 to 4; and

p is 1-4,

with the proviso that at least one of R^1 and R^2 is selected from the group consisting of C_{1-6} alkyl, $O-Si(C_{1-6}$ alkyl)(C_{1-6} alkyl)(C_{1-6} alkyl), CF_3 , OCF_3 and halo.

57. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



wherein

R^1 and R^2 are each independently selected from the group consisting of H, OH, C_{1-6} alkyl, NH_2 , $NH-C_{1-6}$ alkyl, SH, $S-C_{1-6}$ alkyl, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, CF_3 , OCF_3 and halo;

R^3 is selected from the group consisting of H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}$ alkyl, $O-Si(C_{1-6}alkyl)(C_{1-6}alkyl)(C_{1-6}alkyl)$, NO_2 , halo and $CH_2-S-(CH_2)_nAr$;

R^4 is CO_2H ;

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C_{1-6} alkyl, C_{1-6} alkoxy, NH_2 , $NH-C_{1-6}$ alkyl, $N(C_{1-6}alkyl)(C_{1-6}alkyl)$, SH, $S-C_{1-6}$ alkyl, NO_2 , CF_3 , OCF_3 and halo;

n is 0 to 4; and

p is 1-4,

with the proviso that R^1 , R^2 and R^3 are not all H.

58. (New) The compound (*E,E*)-2-carboxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR-14).